

Appl. No. 10/723,912
Amdt. dated June 16, 2006
Reply to Office action of January 19, 2006

REMARKS/ARGUMENTS

Claims 1-36 are pending in the present application.

This Amendment is in response to the Office Action mailed January 19, 2006. In the Office Action, the Examiner:

objected to claims 1, 5, 13, 17, 25, 29 because of informalities;

rejected claims 13-24 under 35 U.S.C. §101;

rejected claims 1, 3-8, 10, 13, 15-20, 22, 25, 27-32, 34 under 35 U.S.C. §102 (b);

rejected claims 9, 21, 33 under 35 U.S.C. §103(a); and

allowed subject matter in claims 2, 11, 12, 14, 23, 24, 26, 35, 36.

Reconsideration in light of the amendments and remarks made herein is respectfully requested.

Claim Objection

In the Office Action, the Examiner objected to claims 1, 5, 13, 17, 25, 29 due to informalities, specifically because the use of "set of" in these claims was inconsistent. In response, Applicant has amended claims 1, 13, and 25 to correct the minor informalities. Accordingly, Applicant respectfully requests the objection be withdrawn.

Rejection Under 35 U.S.C. § 101

In the Office Action, the Examiner rejected claims 13-24 under 35 U.S.C. §101 as being unpatentable because the claimed invention is directed to non-statutory subject matter. Specifically, the Examiner states that Applicant has claimed "a machine-accessible medium including data ..." which is viewed as non-statutory in view of the specification which discloses on page 10 that this medium includes "any medium that can store, transmit, or transfer information" including "fiber optic medium, a radio frequency (RF) link, etc." The Examiner states that "to overcome this rejection, Applicant must amend the claims to refer only to a machine-accessible storage medium. Applicant respectfully traverses the rejection for the following reason.

It appears that the Examiner was applying the interim examination guidelines recently proposed by the USPTO that characterize signal claims as non-statutory subject matter. The USPTO argues that a signal is not a process, composition of matter, machine, or article of manufacture. The signal has "no physical structure" and does not "itself perform any useful,

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concrete, and tangible result" and therefore is a non-statutory natural phenomenon. "These interim guidelines propose that such signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101. Public comment is sought for further evaluation of this question." See Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, 1300 OG 142 (November 22, 2005).

This proposed USPTO interim guideline on signal claims is still being evaluated. Applicant does not agree with the USPTO's proposition that a machine-accessible medium such as a radio frequency (RF) link does not have a physical structure and does not itself perform a useful, concrete, and tangible result. This type of medium does have a physical structure that is not visible to the naked eye and does itself perform a useful, concrete, and tangible result (which is to transmit or transfer information from one location to another).

However, in order to obtain a timely allowance of the claims, Applicant has amended the specification by deleting "a radio frequency (RF) link" as an example of machine-accessible medium (Specification, page 10, line 7). Note that a non-storage medium such as a fiber optic medium does have a physical structure and does itself perform a useful, concrete, and tangible result.

Accordingly, Applicant submits that claims 13-24 are statutory under 35 U.S.C. §101 and respectfully requests the rejection be withdrawn.

Rejection Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1, 3-8, 10, 13, 15-20, 22, 25, 27-32, 34 under 35 U.S.C. §102 (b) as being anticipated by U.S. Patent No. 5,133,075 issued to Risch ("Risch"). Applicant respectfully traverses the rejection and submits that the Examiner has not met the burden of establishing a prima facie case of anticipation.

Risch discloses a method of monitoring an attribute of an object in an interactive object-oriented database system in response to a request from a client program and invoking an application procedure designated by the client if a change in a monitored attribute value is detected. Any of a plurality of client programs can request monitoring of attributes of objects in the database. A record is kept of update transactions initiated by an update client. When the update client commits a change to the value of a monitored attribute, a monitoring client which has requested monitoring of the attribute is notified of the change. The notification

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interrupts the monitoring client and invokes a predesignated client procedure (Risch, Abstract; Figures 6A and 6B; column 3, lines 49-54; column 5, lines 12-36).

Risch does not disclose, either expressly or inherently, at least one of (a) receiving at a snapshot module a request from a user to monitor a set of specified resources; (b) requesting, via the snapshot module, a monitor request module to create at least one monitor; (c) creating at least one monitor using the monitor request module; (d) loading into the monitor parameters of the specified resources; (e) creating a set of first objects corresponding to a snapshot of the specified resources based on the loaded parameters, the snapshot representing states of the specified resources at a point in time; and (f) monitoring the first objects using the monitor.

Risch merely discloses an attribute of an object in an object-oriented database system, not a snapshot of the specified resources representing states of the specified resources at a point in time. An attribute of an object in an object-oriented database system is merely a data in a database (see, for example, column 6, lines 17-21). In contrast, "a snapshot is a collection of objects representing the system states at a point in time. A snapshot may comprise several collections of objects, with the objects belonging to the same collection being of the same type. The collections of objects may include a collection of file objects, a collection of registry objects, a collection of process objects, a collection of hardware objects, and a collection of certification objects." (see Specification, page 6, lines 13-18).

An attribute of an object in an object-oriented database system merely gives a data value. Monitoring such an attribute can only detect changes made by a client to that attribute value, it does not provide the ability to detect changes in the system state of a complex computer system in real time. System state is defined as a run-time state of system resources at a particular instant in time (Specification, page 2, lines 22-23). The resources of a computer that may be of interest at run time are its hardware, file systems, processes running on the system, a and its registry (Specification, page 2, lines 24-26).

The Examiner contends that Risch discloses (a) receiving at a snapshot module a request from a user to monitor a set of specified resources, citing Risch, col. 5, line 26 (Office Action, page 3). Applicant respectfully disagrees. The cited excerpt merely discloses that a client requests to monitor an attribute of an object in the database. This does not correspond to receiving at a snapshot module a request from a user to monitor a set of specified

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resources. Specified resources, in view of the Specification, are not the same as attributes of an object in a database. Risch does not disclose a snapshot module as disclosed in the Specification.

The Examiner contends that Risch discloses (b) requesting, via the snapshot module, a monitor request module to create at least one monitor, citing Risch, col. 7, line 28 (Office Action, page 3). Applicant respectfully disagrees. The cited excerpt merely discloses that “preferably a monitor is defined for a given attribute in advance of any request to monitor that attribute”. This does not correspond to requesting, via the snapshot module, a monitor request module to create at least one monitor. Risch does not disclose the snapshot module and the monitor request module as disclosed in the Specification.

The Examiner contends that Risch discloses (c) creating at least one monitor using the monitor request module, citing Risch, col. 7, line 28 (Office Action, page 3). Applicant respectfully disagrees. The cited excerpt merely discloses that “preferably a monitor is defined for a given attribute in advance of any request to monitor that attribute”. This does not correspond to creating at least one monitor using the monitor request module. Risch does not disclose the monitor request module as disclosed in the Specification.

The Examiner contends that Risch discloses (d) loading into the monitor parameters of the specified resources, citing Risch, col. 7, line 35 (Office Action, page 3). Applicant respectfully disagrees. The cited excerpt merely discloses that “the Define Monitor procedure is begun by a user who tells the system which attribute is to be monitored”, and that “every attribute is accessed by a function (either an extensional function or an intensional function), and the monitor procedure which is defined for a given attribute is defined in terms of the function which accessed that attribute (this function is hereafter referred to as “the monitored function”). This does not correspond to loading into the monitor parameters of the specified resources. Parameters of specified resources that represent a system state are not the same as a function that accesses an attribute of an object in a database system. A user defines the parameters for the specified resources to be monitored the same way as in the case of defining parameters for a standard static snapshot of the specified resources (Specification, page 23, lines 24-26). Parameters of specified resources are the snapshot parameters defined by the user (Specification, page 24, lines 3-4). Risch does not disclose parameters of specified resources representing a snapshot of the system state.

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The Examiner contends that Risch discloses (e) creating a set of first objects corresponding to a snapshot of the specified resources based on the loaded parameters, the snapshot representing states of the specified resources at a point in time, citing Risch, col. 7, line 59 (Office Action, page 3). Applicant respectfully disagrees. The cited excerpt merely discloses that "The Define Monitor procedure preferably includes creating means for keeping a record of the value of the attribute being monitored. More particularly, an Attribute Value table is created (block 503) for the monitored function. This table includes positions for recording the value of the attribute accessed by the function". This does not correspond to creating a set of first objects corresponding to a snapshot of the specified resources based on the loaded parameters, the snapshot representing states of the specified resources at a point in time. Risch does not disclose a set of first objects corresponding to a snapshot of the specified resources based on the loaded parameters, the snapshot representing states of the specified resources at a point in time.

The Examiner contends that Risch discloses (f) monitoring the first objects using the monitor, citing Risch, col. 7, line 65 (Office Action, page 4). Applicant respectfully disagrees. The cited excerpt merely discloses that "when monitoring is begun, the then-current value of that attribute is calculated and entered in the table" and that "Comparison of that value with the [value] of the monitored attribute after an update tells the system whether the monitored value was in fact changed as a result of the update". This does not correspond to monitoring the first objects using the monitor. Monitoring an attribute for a change in its value is not equivalent to monitoring the first objects corresponding to a snapshot of the specified resources, the snapshot representing states of the specified resources at a point in time. Risch does not disclose such first objects.

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Vergegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the...claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ 2d 1913, 1920 (Fed. Cir. 1989). Since the Examiner failed to show that Risch teaches or discloses any one of the above elements, the rejection under 35 U.S.C. §102 is improper.

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Therefore, Applicant believes that independent claims 1, 13, 25 and their respective dependent claims are distinguishable over the cited prior art reference. Accordingly, Applicant respectfully requests the rejection under 35 U.S.C. §102(b) be withdrawn.

Rejection Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 9, 21, 33 under 35 U.S.C. §103(a) as being unpatentable over Risch as applied to claim 1, 13, 25 above, and further in view of "COM" by Microsoft Computer Dictionary (MSCD). Applicant respectfully traverses the rejection and submits that the Examiner has not met the burden of establishing a *prima facie* case of obviousness.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP §2143, p. 2100-129 (8th Ed., Rev. 2, May 2004)*. Applicant respectfully submits that there is no suggestion or motivation to combine their teachings, and thus no *prima facie* case of obviousness has been established.

Risch discloses a non-blocking drain method and apparatus for use in processing request on a resource as discussed above.

MSCD discloses that COM is a specification developed by Microsoft for building software components that can be assembled into programs or add functionality to existing programs running on Microsoft Windows platforms.

Risch and MSCD, taken alone or in combination, do not disclose, suggest, or render obvious, that the monitor for monitoring the first objects corresponding to a snapshot of the specified resources based on the loaded parameters, the snapshot representing states of the specified resources at a point in time, is implemented as one of a COM object, a thread, and a process, as recited in claims 9, 21, and 33.

As discussed above in connection with the 35 U.S.C. §102 rejection, Risch does not disclose, among other things, creating a set of first objects corresponding to a snapshot of the specified resources based on the loaded parameters, the snapshot representing states of the specified resources at a point in time, and monitoring the first objects using the monitor.

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Therefore, combining Risch with any other reference is improper. Monitoring changes in value of an attribute of an object in an interactive object-oriented database system is not the same as monitoring a set of specified resources representing the state of the computer system to detect changes in the system state. Therefore, even if the monitoring of an attribute of an object in a database system can be performed by a COM object, this does not render obvious the monitoring of a set of specified resources representing the system state using one of a COM object, a thread, and a process.

Furthermore, there is no motivation to combine Risch and MSCD because there is no teaching or suggestion in Risch that the method can be implemented with programs running on Microsoft Windows platforms, where COM objects can be used. In addition, Risch, read as a whole, does not suggest the desirability of monitoring a set of specified resources representing a system state. For the above reasons, the rejection under 35 U.S.C. §103(a) is improperly made.

When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: (A) The claimed invention must be considered as a whole; (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) Reasonable expectation of success is the standard with which obviousness is determined. Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986). "When determining the patentability of a claimed invention which combined two known elements, 'the question is whether there is something in the prior art as a whole suggests the desirability, and thus the obviousness, of making the combination.'" In re Beattie, Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 1462, 221 USPQ (BNA) 481, 488 (Fed. Cir. 1984). To defeat patentability based on obviousness, the suggestion to make the new product having the claimed characteristics must come from the prior art, not from the hindsight knowledge of the invention. Interconnect Planning Corp. v. Feil, 744 F.2d 1132, 1143, 227 USPQ (BNA) 543, 551 (Fed. Cir. 1985). To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. In other words, the Examiner must show reasons that a skilled artisan, confronted with the same problems as

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the inventor and with no knowledge of the claimed invention, would select the prior elements from the cited prior references for combination in the manner claimed. In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1996), 47 USPQ 2d (BNA) 1453. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or implicitly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." Ex parte Clapp, 227 USPQ 972, 973. (Bd.Pat.App.&Inter. 1985). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Furthermore, although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." In re Mills 916 F.2d at 682, 16 USPQ2d at 1432; In re Fitch, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992).

In the present invention, the cited references do not expressly or implicitly suggest any of the above elements of claims 9, 21, 33. In addition, the Examiner failed to present a convincing line of reasoning as to why one skilled in the art would have found the claimed invention to have been obvious in light of the teachings of Risch and MSCD.

Therefore, Applicant submits that independent claims 1, 13, and 25 and their respective dependent claims are distinguishable over the cited prior art references. Accordingly, Applicant respectfully requests the rejection under 35 U.S.C. §103(a) be withdrawn.

Allowable Subject Matter

In the Office Action, the Examiner indicated that claims 2, 11, 12, 14, 23, 24, 26, 35, 36 would be allowable if they were rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant respectfully thanks the Examiner, however, Applicant believes that the newly amended independent claims 1, 13, and 25, and their respective dependent claims, are in condition for allowance.

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Conclusion

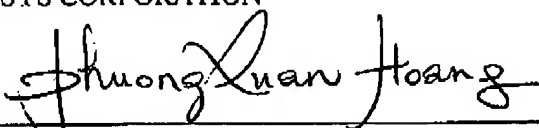
Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

UNISYS CORPORATION

Dated: June 16, 2006

By


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